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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Implementation of Section 255 of the Telecommunications Act of 1996	)	
	)	WT Docket No. 96-198
Access to Telecommunications Services, Telecommunications Equipment, and Customer Premises Equipment by Persons with Disabilities	)	

REPLY COMMENTS OF THE MULTIMEDIA TELECOMMUNICATIONS ASSOCIATION

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SUMMARY

The comments underscore the need for the Commission to rely primarily on market mechanisms rather than complaint procedures as the primary vehicle for enforcing Section 255. Manufacturers' decisions about whether accessibility improvements are readily achievable are necessarily judgment calls that depend on a host of subjective as well as objective factors. Because of the time lag between the design phase and actual product use, fast-track complaint procedures cannot provide much help in "fixing" manufacturers' "mistakes" in determining what is "readily achievable."

Further, given the lack of settled standards in this area, no useful purpose is served by second-guessing, years after the fact, a manufacturer's assignment of priorities among the multitude of possible accessibility improvements conceivable, especially in the business system context. Further, it would be unfair to impose harsh penalties on manufacturers for failing to anticipate all the improvements that might be deemed "readily achievable" when considered in isolation with the aid of hindsight.

The factors considered in determining what is or was readily achievable should include the cumulative costs of achievability assessments themselves, and should include marketing impacts.

Access Board guidelines should be carefully reviewed and not automatically adopted. For example, the Access Board guideline on telephone volume control goes beyond what appears to be technically feasible, and far beyond current regulatory requirements.

In addressing compatibility of equipment with accessible peripherals, manufacturers should have discretion in determining which "commonly used" products are considered in "achievability" assessments.

Others support MMTA's position that reasonable threshold requirements must be adopted for complaints, especially regarding business equipment. Contrary to the views of some parties, the Commission should avoid applying its rules and guidelines to the period before any party had reasonable notice of what was expected under the Act. Further, the Commission should not require costly retrofitting of equipment where a manufacturer failed to correctly assessment what was "readily achievable" in the design phase.

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THE MULTIMEDIA TELECOMMUNICATIONS ASSOCIATION

Pursuant to the Commission's Notice of Proposed Rulemaking ("Notice") in Docket No. 96-198, released April 20, 1998, Multimedia Telecommunications Association ("MMTA") hereby respectfully submits its reply comments regarding the Commission's proposed implementation of Section 25 5 of the Telecommunications Act (the "Act").

I. THE COMMENTS DEMONSTRATE THE NEED FOR THE COMMISSION TO RELY PRIMARILY ON MARKET MECHANISMS RATHER THAN COMPLAINT PROCEDURES TO ENFORCE SECTION 255

A variety of comments from parties on all sides of the issue validate MMTA's concern that market mechanisms rather than complaint procedures should be the primary vehicle for enforcing Section 255. As a number of parties point out, what is "readily achievable" in a particular context depends on the particular manufacturer and product or

product line involved. In addition, whether a particular access function is readily achievable will depend on manufacturer decisions about the achievability of other access functions.[1] As a result, each manufacturer's "readily achievable" decisions necessarily are judgment calls that depend on a host of subjective as well as objective factors.

At the same time, there is necessarily a time lag between (1) the period when a product is being designed, which is when the "readily achievable" assessment needs to be made, and (2) the period when a product is actually being used, which is when any complaints about the product presumably would be filed. As Siemens Business Communication Systems, Inc. ("Siemens") points out, because of this time lag and the fact that readily-achievable assessments are context-specific judgment calls, "a manufacturer is forced to wait to determine if it is compliant until the product hits the market and after all the up-front design, fabrication and product distribution costs have been occurred." Siemens at 4-5. If a manufacturer is going to be subject to significant regulatory sanctions for making the "wrong call" after so much time has passed, there is a major "disincentive for manufacturers to incorporate innovative designs and innovative access features into their products." Id.

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[1] This is true because (1) decisions to provide certain access functions are likely to use up resources that could be used to provide other access functions, and (2) providing certain access functions is likely to affect the feasibility of incorporating other access functions. See, Strategic Policy Research, "An Evaluation of the Access Board's Accessibility Guidelines" ("SPR Evaluation"), at Exhibit A of the Telecommunications Industry Association's ("TIA") June 30, 1998 Comments.

Thus, unless the FCC is prepared to provide detailed up-front guidance on what is deemed readily achievable for each product, as Siemens recommends, a rigorous regime of regulatory second-guessing, several years after the fact, as to what is (or rather, was) "readily achievable" in a particular context will not be fair or productive.' As several parties point out, it will only promote defensive record-building activity while discouraging innovative design activities.

The alternative is, as MMTA proposed, to define issues of compliance and non-compliance more broadly, in terms of a manufacturer's overall effort, and to place primary emphasis on securing implementation of Section 255 through market mechanisms. As MMTA detailed, the Commission should encourage the private sector to develop "checklists" of significant accessibility features that could be used (1) by manufacturers to develop accessibility priorities and (2) by equipment purchasers and disability-related groups to evaluate manufacturers' success in implementing Section 255. Specific government investigations of a particular manufacturer's compliance should be reserved for the most egregious cases where a manufacturer has made little or no effort to address accessibility issues.

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[2] Further doubt on this approach is cast by a number of parties who argue convincingly that the Commission lacks authority to impose penalties or award damages against equipment manufacturers for Section 255 non-compliance under Sections 207 or 208 of the Act. See, e.g., TIA at 97-98; Uniden America Corporation ("Uniden") at 8-10.

II. DEFINITION OF READILY ACHIEVABLE

A. Manufacturers must be allowed to prioritize their accessibility efforts

The comments confirm the importance of allowing manufacturers broad discretion to set priorities for which features of products or product lines" should be the initial focus of "readily achievable" assessments, and for which accessibility functions should be given priority in such assessments.

As yet, there are no settled standards governing the manner in which products should be made more accessible.[4] Thus, accessibility efforts will be inherently more costly and time-consuming. In many instances, the solutions must be invented for the first time. This is particularly a problem with rapidly advancing telecommunications technology.

Given the lack of settled standards and the large number of accessibility functions that potentially must be considered for each product and product feature, it is inevitably necessary to set priorities in terms of focusing the limited resources available to each manufacturer. It is appropriate for the FCC to let these priorities be determined in the

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[3] MMTA concurs with TIA that "readily achievable" determinations should be made on the basis of product lines, not individual products. TIA at 17-19. See also, Motorola, Inc. ("Motorola") at 49.

[4] In this regard, contrary to the claims of some parties, the Section 255 context differs significantly from the context of accessibility to buildings and facilities under the ADA. In the ADA context, ANSI standards governing most aspects of accessible facilities construction were in place several years prior to the Act. Nothing comparable is yet in place for the telecommunications equipment context.

private sector." However, if the Commission leaves it to manufacturers (assisted by industry and disability-related organizations) to decide, in the first instance, where to allocate the limited design resources that could render some access functions "readily achievable," then the Commission should be prepared to respect the results of the manufacturer's good-faith decisions. It is not acceptable for manufacturers to be subject to the Catch-22 of being required to undertake open-ended achievability assessments, and then be subjected to litigation and threatened liability if their judgments about where to focus resources "overlooked" some improvement that, in hindsight, appears "readily achievable."

B. The definition of "readily achievable" must take account of the cumulative cost of accessibility efforts and of readily achievable assessments

As explained by MMTA and some other parties, the definition of "readily achievable" must take account of the cumulative cost of accessibility efforts undertaken by a company, including the costs of "achievability" assessments themselves. MMTA at 9-12, TIA at 45-46, Motorola at 36-37, BellSouth Corporation at 9, GTE at 7-10, CTIA at 7-9, United States Telephone Association at 9-10. As shown by TIA's consultants, Strategic Policy Research, the costs of assessing achievability are themselves substantial, and each accessibility function that is added causes costs to be incurred. See SPR Evaluation.

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[5] The alternative would be for the FCC to, at a minimum, offer guidance as to how to prioritize among accessibility needs. In its ADA regulations, the Department of Justice recognized the need to set priorities in determining what barrier-removal activity is "readily achievable:" and provided some guidance in that respect. 28 CFR § 36.304(c). Such

The need for this is even more apparent in light of various parties' support of the Commission's proposed "presumption that the resources reasonably available to achieve accessibility are those of the entity . . . legally responsible for the equipment . . . ." Notice, ¶ 109. If the resources of the entity as a whole are to be considered, then the costs of other accessibility efforts and readily achievable assessments undertaken by the entity also must be considered.

C. Opportunity costs and market impacts must be considered

The National Association of the Deaf ("NAD") and others object to consideration of the impact of accessibility on marketability, on the grounds that "these are considerations which are quite foreign to the concept of readily achievable . . . ." NAD at 27.

For example, the NAD objects to the inclusion of "opportunity costs" in the costs to be considered by manufacturers in making "readily achievable" assessments. "Opportunity costs" are "costs associated with decreasing access with respect to another disability, or otherwise reducing product or service performance in another way." NAD at 23. NAD contends that "these 'costs' are highly subjective[,]" and that "[w]ithout clearly defined and objective measures for determining these costs, consumers are left at the mercy of companies who, on their own, may determine that the 'opportunity costs' for achieving a certain type of access are prohibitive." Id.

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guidance would reduce, but would by no means eliminate, the need to allow manufacturers discretion in allocating resources.

Similarly, if a product becomes less marketable as a result of accessibility add-ons, it is entirely fair to view the accessibility as resulting in considerable "difficulty or expense." Although NAD claims that all companies will be affected similarly, and therefore will not be harmed by loss of marketability, NAD provides no evidence to support its claim. In fact, different companies have different resources and product mixes, and will be affected quite differently by a reduction in the attractiveness of a particular product.

Almost all equipment manufacturers are "niche" players. There are only a few manufacturers who have products at virtually every level of the marketplace. The niches may be defined by product type, target industry, line size, or all three. For example, a manufacturer may design some of its products to target or cater to a particular industry, such as the banking or hotel industry. Similarly, most manufacturers focus on systems of a specific size or range of sizes – e.g., large, medium or small. While the manufacturer may also design other systems, its market share will be lower in areas where it has not specialized. A manufacturer's niche may also be defined by whether its products are sold to business or consumer users. Within these various ways of defining the market, the impact of design changes that affect the marketability of a product will be different depending on the role of that product in a manufacturer's overall business.

III. THE COMMISSION SHOULD NOT AUTOMATICALLY ADOPT THE ACCESS BOARD GUIDELINES

MMTA agrees with those commenters who urge the Commission to carefully review the Access Board guidelines to determine their feasibility in the equipment manufacturing context. For example, as a number of commenters point out, the Access Board's guideline

on auditory output, which would require voice signals to provide a gain adjustable up to a minimum of 20 dB, has adopted a goal that is not realistic. See e.g., Uniden at 3, Siemens at 14-15, Lucent Technologies ("Lucent") at 13. As explained by Siemens, tests by Siemens engineers showed that the telephone models used in the tests relied upon by the Access Board encounter feedback and noise problems when volume control is attempted to be extended to 20 dB and beyond. Siemens at 14-15 and Appendix. Further, Northern Telecom, Inc. ("NorTel") points out that:

> There are numerous problems with attempting to meet the 20 dB gain suggested by the Access Board guidelines. In order to provide 20 dB gain, most phones would require separate AC power. In the case of cordless phones, battery voltage limitations would make such a gain impossible. In addition, low-cost solutions with a simple adjustable resistor would be precluded because of the need to reset the phone to nominal as a result of exceeding the 18 dB threshold specified in 47 C.F.R. § 68.317(f). A further complication arises because meeting the 20 dB gain will greatly increase distortion, thereby defeating the benefits of the gain (or imposing significant costs in overcoming the increased distortion). Similarly, the current network requirements seek to ensure an acceptable level of quality by balancing the loudness versus the echo. Increasing the loudness will cause the far-end talker to hear significantly greater echo (his or her voice returned). In order to compensate for this increased echo, expensive echo cancelers would need to be added to all telephones and/or echo cancelers would need to be added to the network. Finally, the dynamic range of the voice signal with 20 dB of gain is reduced to a point where it might cause clipping for loud talkers as a result of the continuous sound pressure limits in performance standards (e.g., ANSI/TIA/EIA-470-B- 1998 or ANSI/EIA-470-A-1987).

NorTel at n.12.

Furthermore, the Access Board's rationale for adopting its guidelines was based on a misunderstanding of the currently applicable FCC rule on volume control. 47 C.F.R. § 68.319. The existing FCC rule requires that volume controls should enable the volume

to be turned up so that the *highest* setting is at least 12 dB and at most 18 dB above the nominal level. The Access Board stated, however, that:

> [The existing FCC rule] is frequently incorrectly applied so that the gain only falls somewhere within this range but does not reach the 18 dB level. In fact, the requirement is to provide gain for the entire range of 12-18 dB.

63 Fed. Reg. at 5622.

It is the Access Board that has misinterpreted the FCC rule. The Commission's rule was adopted pursuant to a negotiated rulemaking. The Final Report of the FCC Hearing Aid-Compatibility Negotiated Rulemaking Committee, CC Docket No. 87-124, August 1995, ("HAC Committee Report"), clearly states the Committee's recommendation as follows:

> § 68.319 Volume Control
>
> A telephone complies with the Commission's volume control requirements if the telephone is equipped with a receive volume control that provides, through the receiver in the handset or headset of the telephone, 12 dB of gain minimum and up to 18 dB of gain maximum, when measured in terms of Receive Objective Loudness Rating (ROLR), as defined in paragraph 4.1.2 of ANSI/EIA-470-A-1987, or subsequent revisions thereto. The ROLR for each loop condition is first measured with the receive volume control set to its nominal gain setting by positioning the receive volume control to its minimum gain setting (unless the manufacturer identifies a different nominal gain position), followed by measuring the ROLR with the receive volume control at its maximum setting. The ROLR shall increase by no less than 12 dB or more than 18 dB. ROLRs shall be determined over the frequency range of 300 to 3,300 Hz. The 18 dB of receive gain may be exceeded provided that the amplified receive capability automatically resets to nominal gain when the telephone *is* caused to pass through a proper on-hook transition.

HAC Committee Report, Section VI.D.1, p. 3 (emphasis added).

This excerpt clearly demonstrates that the HAC Committee contemplated a rule that allows the highest setting for a telephone set's volume control to provide a gain of 12 dB over the ROLR at the nominal setting of the volume control. There is no reason to believe that the FCC dramatically altered this approach in adopting its final rule. Manufacturers have been designing equipment in reliance on this rule.

In short, the Access Board's guideline, indicating that the highest setting should be at least 20 dB, is an inappropriate target, from the perspective of both feasibility and its relationship to existing regulatory standards.

Iv. COMPATIBILITY

As MMTA pointed out in its comments, the FCC must recognize that individual manufacturers should not be held responsible for incompatibility of equipment with peripherals or specialized CPE in the absence of industry standards allowing compatibility. MMTA at 28. A number of parties agree. See, e.g., TIA at 41, Siemens at 8-l 0, NorTel at 8-9, Motorola at 46-48.

This recognition becomes even more important if, as several parties urge, the FCC adopts an expansive definition of "commonly used" peripheral equipment with which CPE should be compatible. NAD at 8; National Council on Disability at 18-19.

MMTA believes the FCC should allow manufacturers to use their discretion, as part of the broad latitude that should be afforded to manufacturers in making "readily achievable" assessments, to determine the "commonly used" products that will be considered for compatibility in "achievability" assessments. Manufacturers should not be

required to exhaust available resources in conducting achievability assessments for an endless series of products.

In the event that the Commission decides not to allow manufacturers discretion in determining which peripheral products are "commonly used," then it is incumbent upon the Commission to maintain a list of such "commonly used" products, in order to provide guidance to manufacturers.

In either event, MMTA concurs with TIA that manufacturers should not be required to make their equipment compatible with outdated technologies such as TTY. TIA at 38-41.

V. THE COMMISSION SHOULD APPLY REASONABLE THRESHOLD REQUIREMENTS FOR ANY SECTION 255 COMPLAINTS

Lucent agrees with MMTA that complaints against manufacturers of business equipment are likely to inappropriately place the manufacturer in the middle of a dispute between the complainant-employee and his or her employer. Lucent at 11-12. Therefore, the Commission should adopt MMTA and Lucent's proposal that any complaints about business equipment should first be raised with the employer.

VI. TRANSITION TIME

A number of commenting parties take the position that the Commission should apply its rules and/or the Access Board guidelines as of the effective date of the Act. As noted in MMTA's Comments at 29-30, such an approach would threaten to place

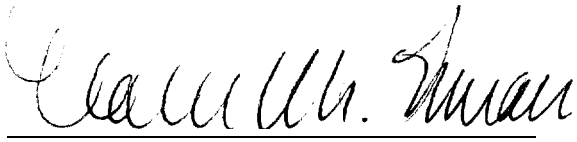
manufacturers in an untenable position. Even assuming that the general requirement of Section 255 was technically applicable, manufacturers cannot reasonably be expected to have anticipated the contents of the Access Board guidelines or the rules to be issued by the Commission. Little purpose would be served by trying to "catch" manufacturers for failing to consider accessibility improvements before they had any meaningful notice of the implementation steps expected of them.

VII. REMEDIES

Given the time lag between product design and the time when complaints are likely to be made, the question arises whether, in the event that a product modification is found to have been readily achievable for a particular manufacturer, the manufacturer should be required to go back and retrofit its products that were "improperly" designed. This would be a draconian remedy that should be applied, if at all, only in the most egregious cases. As shown by the example of hearing aid compatibility, modifications to equipment are far more expensive to make *after* the design phase. No useful purpose would be served by requiring the redesign and retrofitting of equipment, especially since, once a design feature is determined to be "readily achievable," it is likely to be incorporated in the design phase of current products at far less cost. Requiring retrofitting of equipment that was designed pursuant to an incorrect "readily achievable" assessment would be a punitive act unauthorized by the statute.

August 14, 1998

Respectfully submitted,



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